

NORTHEASTERN FOREST PEST REPORTER

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FOREST INSECTS

SPRUCE BUDWORM (*Choristoneura fumiferana*) Biological control studies in the Madawaska Lake - Stockholm area of northern Maine indicate a sharp reduction in late larval mortality in 1956 due to parasites. Pupal parasitism increased, although it was still not a significant factor. Egg parasitism was extremely low in the study area and in all sections covered by the egg mass survey. The latter survey revealed higher egg mass deposition over most of northern Maine, with the greatest increase over 1955 in the Portage - Ashland area. The number of eggs per mass also approximately doubled over that for 1955. Moth flights were reported in Fort Fairfield and Caribou about August 4 - 6. In brief, increased populations are expected over most of northern Maine in 1957. A more complete analysis of the 1956 budworm situation and the predictions and plans for 1957 will be presented in a joint report by the Maine Forest Service and the Northeastern Forest Experiment Station.

PINE ENGRAVER BEETLES (*Ips* sp.) Reports from New York and Massachusetts indicate generally lessened activity in red pine plantations this year, probably due to the generally cool, wet weather this summer. Many red pine plantings in these and other states have now reached the stage where thinnings are silviculturally desirable and/or economically feasible. Many of the infestations reported thus far have followed thinning operations, indicating the need of care in removal or disposal of slash and undesirable trees. The practice of girdling undesirable trees, leaving them remaining in the stand, is particularly hazardous. In Maryland, localized attacks on pines injured by salt spray and lightning are reported.

GALL APHID (*Pineus floccus*) This pest, usually unimportant, has been abundant in New York. Alternately attacking white pine and spruce, the insect caused terminal galls on spruce this year. The galls are presently a conspicuous orange color.

BAGWORM (*Thyridopteryx ephemeraeformis*) This perennial pest is reported in greatly increased numbers on redcedar, arborvitae, willows, sycamore, and a wide variety of ornamentals in Maryland and Delaware.

LARCH SAWFLY (*Pristiphora erichsonii*) Heavy defoliation occurred for the third consecutive year in a European larch plantation in Clinton County, Pennsylvania. A very small infestation in the Monongahela National Forest was treated effectively with DDT.

PINE GALL WEEVIL (*Podapion gallicola*) Causing numerous galls on Virginia pine in the vicinity of Petersburg and Redden, Delaware.

SARATOGA SPITTLEBUG (*Aphrophora saratogensis*) Adults common on Virginia and loblolly pines at Petersburg, Delaware.

SADDLED PROMINENT (*Heterocampa guttivitta*) Approximately 2,150 acres were sprayed for control of this hardwood defoliator in eastern Rensselaer County, New York. A 12% DDT solution was applied at the rate of 1/2 gallon per acre during the week of July 30. Preliminary checks in the treated area indicate very good control. Stripping of northern hardwoods occurred over a large area southwest of Millinocket, Maine.

VARIABLE OAK LEAF CATERPILLAR (*Heterocampa manteo*) Localized outbreaks by this insect in Maryland and Delaware were reported in the last North-eastern Forest Pest Reporter. Defoliation continued during the first half of August in Sussex County, Delaware. Some oaks defoliated early in the season have refoliated.

LOCUST LEAF MINER (*Chalepus dorsalis*) The widespread annual occurrence of this leaf miner was again evident in central Maryland, northern Delaware, New Jersey, and southern Connecticut. This is a very persistent pest.

GYPSY MOTH (Portheretria dispar) The patrol of moth traps in New York was continued during August. The flight of male moths was 2 weeks or more later than usual, so final results will not be known until later in September. Three significant trap catches were made beyond the quarantine area in central New York in the towns of Fenton, Colesville, and Albion.

OAK TWIG PRUNER (Hypermallus villosus) Severe infestations are reported in southern Maine and south-central Pennsylvania. Counts in some stands in Pennsylvania showed over 100 branches cut from single trees.

Various defoliators such as the WALNUT DATANA, ORANGE-STRIPED OAK WORM, POPLAR TENTMAKER, YELLOW-NECKED CATERPILLAR, FALL WEBWORM, and BROWN ANISOTA are reported as still active in local areas in the different states.

FOREST DISEASES

NEEDLE RUST (Coleosporium solidaginis) Heavy infection occurred on red pine seedlings in the Interlocken section of Stockbridge, Massachusetts. These young trees were planted last year and their tops are now enclosed by tall grass.

NEEDLE RUST (Pucciniastrum myrtilli) The rust was reported on eastern hemlock in West Acton and Concord, Massachusetts.

ASH LEAF RUST (Puccinia peridermiospora) The rust has increased in severity in New Hampshire and has been severe along the coast.

LEAF SPOT (Coccomyces sp.) In the Poconos, particularly in the Pocono Experimental Forest, a huge crop of black cherry seedlings was produced this year. When the seedlings were about 4 inches tall the leaves became infected with Coccomyces in scattered areas. Defoliated seedlings were in patches about 1 foot in diameter, with spotted seedlings radiating from the center of infection. The defoliation has now spread, with patches of defoliation 2 to 4 feet in diameter. Seedlings in openings created by windthrow or cuttings were not affected.

OAK WILT (*Endoconidiophora fagacearum*) In Maryland, oak wilt has been found between Savage Mountain in Garrett County and Fairview Mountain just west of Hagerstown. Air surveys in June and July 1956 revealed 38 additional wilted areas in the Cumberland and east section. Each area contains not more than 4 dead trees. Control measures are being applied. One area on Boyer Mountain in western Washington County, originally found in 1953, showed no evidence of disease in 1954 nor in early 1956. In July 1956, one wilted tree was found adjacent to the control area. The ground check proved it to be oak wilt. In New York State, along the Pennsylvania state line, no evidence of wilt was found this year. Approximately 300 areas of wilted oaks have been located this year in Pennsylvania. This number is slightly below that of last year.

OAK MORTALITY An aerial survey in New York State was made in areas where a large number of red oak trees scattered through several hundred acres of woodland have died annually for the past five years. Very few affected red oaks were observed in these areas this year. This season the rainfall has been above normal. In the southern part of Lackawanna County, Pennsylvania, mortality of oaks has been observed during the past and present seasons. Red and chestnut oaks are affected. Some injury followed a late May frost, but neither that nor oak wilt seems to be the cause. The percentage of dead or dying trees in the stand is not high.

MAPLE DIEBACK In Montague, Massachusetts, several maples had numerous wet bleeding areas on the trunks and small cankers beneath the bark. The inner bark was bright red, and the fluxing liquid was clear. Bacteria were isolated from the inner bark. Except for the color of the liquid, the symptoms resemble those of bleeding canker. Apple cultures, however, failed to reveal any Phytophthora. In southern Maine, dieback and death of sugar maples is occurring occasionally in woodlands. Bleeding canker is severe in New Hampshire this year. It is most prevalent on sugar maples, but has been found on silver, red, and Norway maples, also on red oak, white oak, beech, gray birch, and dogwood.

BEECH DIEBACK Many trees in the Pocono Experimental Forest, Pennsylvania, have a large number of dead twigs and branches throughout the crown. Trees affected by late frost leafed out, but the foliage has been thin and off-color all summer.

NEEDLE BLIGHT White pines in the Monongahela National Forest, at elevations ranging from 1800 to 2700 feet in Greenbrier and Pocahontas Counties, West Virginia, are affected by a discoloration of the present season's needles, typical of white pine needle blight. This injury is not caused by fungi, but by physiological disturbances from various growth factors. Trees from about one foot in height to 40 feet have been affected very rapidly, the trouble being noticeable first on the sides exposed to the most light. A total of about 300 trees in 5 areas show varying amounts of discoloration. In Maine, the needle blight is showing up in small localized areas in the southern part of the state.

STORM DAMAGE On August 18, a windstorm uprooted approximately one million board feet of white pine and hemlock in the Cook Forest State Park, Clarion County, Pennsylvania.

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